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| 09/821,774 | 03/29/2001 | Michael S. Dashefsky | VITLCOM.065A | 5512 |

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| EXAMINER |
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GRAHAM, CLEMENT B

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| ART UNIT | PAPER NUMBER |
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3628

DATE MAILED: 10/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/821,774

Applicant(s)

DASHEFSKY ET AL.

Examiner

Clement B Graham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on March 29, 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 08/01/2001.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-22, are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts. In the present case, claims 1-22, do not recite any structure or functionality to suggest that a computer performs the recited claims. Thus, claims 1-22 are rejected as being directed to non-statutory subject matter.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patent ability shall not be negated by the manner in which the invention was made.

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3. Claim 1-22, are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia US Patent No 5, 065, 315 in of Schrier et al(Hereinafter US Patent No 6,317, 719).

As per claims 1, Garcia discloses a method of assessing patient flow through care units of a hospital, comprising:

collecting data regarding hospital statistics, assigning an hourly cost to each care unit for each patient.(Note abstract and see column 3-4 lines 5-65).

Garcia fail to explicitly teach building a model based upon the collected data and hourly cost, and using the model to simulate the flow of patients through the hospital.

However Schrier discloses calculate drug doses or costs, which will be described later), the system confirms that the user has entered values for patient age, weight, height, sex, liver disease, dialysis status, and, if the patient is not on dialysis, serum creatinine.(see column 6 lines 12-25)and as shown in FIG. 17 (Cases 1-4),the dosage recommended for case 1 is calculated based on the patient's weight, namely 5 mg. per kilogram, every 8 hours. This value is rounded to the nearest 25 mg. in the acyclovir knowledge base because intravenous acyclovir is available in multiples of 25 mg.Case is for the same patient as case 1, only for oral therapy rather than intravenous, and the dosage is 200 mg 5 times a day.(FIG. 17) For case, where the patient has moderate kidney dysfunction (CrCl is between 25 and 50 ml./min.)the dose is 200 mg.reduced to 3 times a day. Because oral acyclovir is available only in 200 and 800 mg tablets, the recommended dose will be 200 mg., 800 mg., or some multiple of those amounts.column 25 line 65 and column 26 lines 30-45).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Garcia to include building a model based upon the collected data and hourly cost, and using the model to simulate the flow of patients through the hospital taught by Schrier in order to document the cost of each patient.

As per claim 2, Garcia discloses wherein each care unit is a hospital department.(see column 3 lines 45-58).

As per claim 3, Garcia discloses further comprising using the model to estimate a cost savings that results from a purchase of patient monitoring equipment.(see column 4 lines 30-54).

As per claim 4, Garcia discloses further comprising using the model to recommend hospital resource changes.(see column 4 lines 30-54).

As per claim 5, Garcia discloses further comprising identifying a bottleneck in the flow of patients through the hospital. (see column 3-4 lines 1-54)

As per claim 6, Garcia discloses where collecting data further comprises locating patients through a patient locating system. (see column 3-4 lines 1-54)

As per claim 7, Garcia discloses wherein collecting data is done in real-time. (see column 3-4 lines 1-54).

As per claim 8, Garcia discloses wherein collecting real-time data comprises using a patient locating system. (see column 3-4 lines 1-54).

As per claim 9, Garcia discloses wherein collecting real-time data comprises using an equipment locating system. (see column 3-4 lines 1-54).

As per claim 10, Garcia discloses wherein collecting real-time data comprises using an Admission Discharge Transmission System. (see column 3 lines 1-65).

As per claim 11, Garcia discloses wherein collecting real-time data comprises using a point of care system. (see column 6 lines 1-44).

As per claim 12, Garcia discloses further comprising predicting a bottleneck in the flow of patients through the hospital through the use of the model. (see column 8 lines 40-65)

As per claim 13, Garcia discloses wherein the collected data comprises data regarding average patient length of stay in a care unit. (see column 3-4 lines 1-54).

As per claim 14, Garcia discloses further comprising determining alternative patient flow routes based upon optimizing efficiency of the hospital. (see column 5-4 lines 1-65).

As per claim 15, Garcia discloses further comprising determining resource utilization based upon the model. (see column 7 lines 44-54)

As per claim 16, Garcia discloses a system for modeling patient flow through care units of a hospital comprising:

a collection module configured to accept data regarding hospital statistics. (Note abstract and see column 3-4 lines 5-65).

Garcia fail to explicitly teach an assignment module configured to assign an hourly cost to each unit for each patient a model module configured to build a model of the flow of patients through the hospital; and a simulation module configured to simulate the flow of patients through the hospital.

However Schrier discloses calculate drug doses or costs, which will be described later), the system confirms that the user has entered values for patient age, weight, height, sex, liver disease, dialysis status, and, if the patient is not on dialysis, serum creatinine.(see column 6 lines 12-25)and as shown in FIG. 17 (Cases 1-4),the dosage recommended for case 1 is calculated based on the patient's weight, namely 5 mg. per kilogram, every 8 hours. This value is rounded to the nearest 25 mg. in the acyclovir knowledge base because intravenous acyclovir is available in multiples of 25 mg.Case is for the same patient as case 1, only for oral therapy rather than intravenous, and the dosage is 200 mg 5 times a day.(FIG. 17) For case, where the patient has moderate kidney dysfunction (CrCl is between 25 and 50 ml./min.)the dose is 200 mg.reduced to 3 times a day. Because oral acyclovir is available only in 200 and 800 mg tablets, the recommended dose will be 200 mg., 800 mg., or some multiple of those amounts.column 25 line 65 and column 26 lines 30-45).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Garcia to include an assignment module configured to assign an hourly cost to each unit for each patient a model module configured to build a model of the flow of patients through the hospital; and a simulation module configured to simulate the flow of patients through the hospital taught by Schrier in order to document the cost of each patient.

As per claim 17, Garcia discloses further comprising an estimation module configured to estimate a cost savings that would result from a purchase of patient monitoring equipment. (see column 5 lines 33-56).

As per claim 18, Garcia discloses further comprising an prediction module configured to predict a bottleneck in the flow of patients.(see column 7 lines 40-65).

As per claim 19, Garcia discloses further comprising an identification module configured to identify a bottleneck in the flow of patients.(see column 5 lines 5-65).

As per claim 20, Garcia discloses further comprising a resource module configured to determine a resource utilization of the hospital.(see column 8 lines 5-65).

As per claim 21, Garcia discloses wherein the collection module is further configured to collect real-time hospital statistics.(see column 3 lines 5-65).

As per claim 22, Garcia discloses wherein the care units include at least the following hospital departments: Admitting, Intensive Care Unit, Surgery and Discharge.9see column 3-4 lines 5-65).

Conclusion

4. The prior art of record and not relied upon is considered pertinent to Applicants disclosure.

Edelman (US 6,064,986 Patent) teaches computer implemented process and architecture for customer account creation maintenance and administration for an investment and or retirement program .

Jones (US Patent 6,021,397) teaches financial advisory system.

Parsons (US Patent 4,486,853) teaches apparatus for receiving and displaying continuously updated data.

Beaulieu (US Patent 5,502,637) teaches investment research delivery system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clement B Graham whose telephone number is 703-305-1874. The examiner can normally be reached on 7am to 5pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sam Sough can be reached on 703-305-0505. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3597 for regular communications and 703-305-0040 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

CG

September 30, 2004


FRANTZY POINVIL
PRIMARY EXAMINER
AU 3628